

Claims

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1. A cellular radio system (30), which comprises terminals (35), cells (31a, 32a, 33a, 34a) and stationary network equipment (36, 37), of which said terminals are arranged to set up and maintain radio communication with the base stations (31, 32, 33, 34) in the cells, **characterized** in that regarding the setting up and maintaining of radio communication at least one terminal (35) is arranged to favour at least one cell (32a, 33a) with respect to other cells (31a, 34a), in a manner independent of other terminals.

5. 2. A cellular radio system according to claim 1, **characterized** in that the stationary network equipment comprises a database (37) for storing cell priority data relating to individual terminals.

10. 3. A cellular radio system according to claim 2, **characterized** in that the stationary network equipment is arranged to supply information to the terminal about priority data stored in the database relating to the terminal, as a response to an excitation, which is one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in said database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal.

15. 4. A cellular radio system terminal (35), which is arranged to set up and maintain radio communication with the base stations (31, 32, 33, 34) in the cells (31a, 32a, 33a, 34a) of the cellular radio system, **characterized** in that regarding the setting up and maintaining of radio communication the terminal is arranged to favour at least one cell (32a, 33a) with respect to other cells (31a, 34a), in a manner independent of other terminals.

20. 5. A terminal according to claim 4 which is further arranged to maintain a list of possible cells for cell reselection and to arrange said list in an order which is based on a parameter calculated for each cell, **characterized** in that for priority cells it is arranged to alter the parameter calculation relating to the cell, so that said parameter gets a particularly advantageous value in the case of a priority cell.

25. 6. A method to realise cell prioritizing in a cellular radio system (30) comprising terminals (35), cells (31a, 32a, 33a, 34a) and stationary network equipment (36, 37), of which said terminals are arranged to set up and maintain radio communication with the base stations in the cells, **characterized** in that regarding the setting up and

maintaining of radio communication it utilizes priority data relating to a terminal in order to favour at least one cell (32a, 33a) with respect to other cells (31a, 34a), in a manner independent of other terminals.

7. A method according to claim 6, **characterized** in that the priority data relating to a terminal is stored in a database (37) of the stationary network equipment, and that the priority data is transmitted to the terminal as a response to an excitation, which is one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in said database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal.

8. A method according to claim 6, in which a terminal further maintains a list of possible cells for cell reselection and arranges said list in an order based on a parameter which is calculated for each cell, **characterized** in that for priority cells the terminal alters the parameter calculation relating to the cell, so that said parameter gets a particularly advantageous value in the case of a priority cell.

9. A method according to claim 8, **characterized** in that the priority data relating to a terminal comprises at least the priority cell identity (20) and information about the fact whether or not the terminal shall apply an offset parameter (17), a delay factor (16) relating to the cell, and cell reselection hysteresis in the calculation of the parameter relating to a priority cell.

10. A method according to claim 9, **characterized** in that the terminal does not apply the delay factor relating to the cell nor the cell reselection hysteresis when it calculates the parameter relating to a cell, in a situation where cell reselection represents shifting from a non-priority cell to a priority cell.

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